C. H. JACKSON.

Foundation for Switch and Signal Connections.

No. 223,650. Patented Jan. 20, 1880.

Fig. 1.

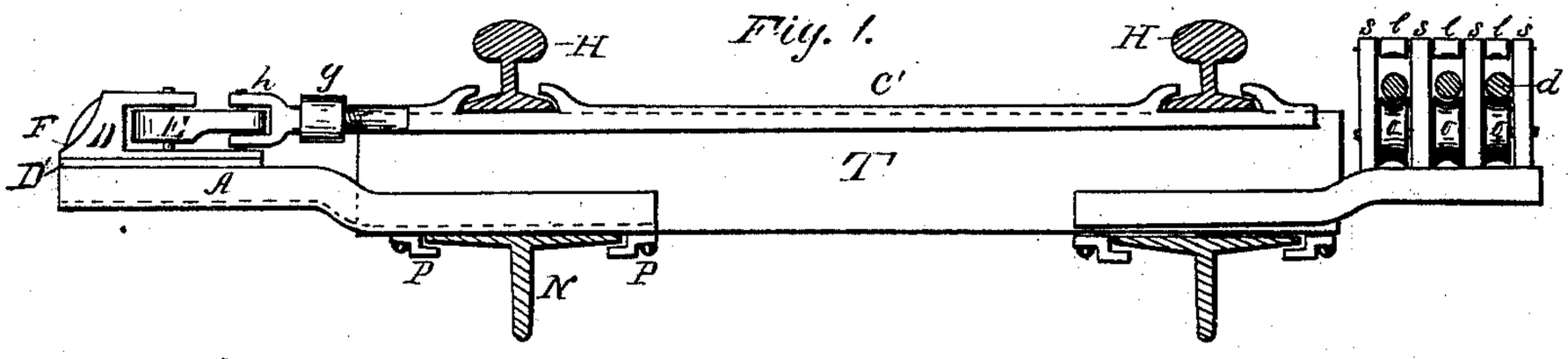


Fig. 2.

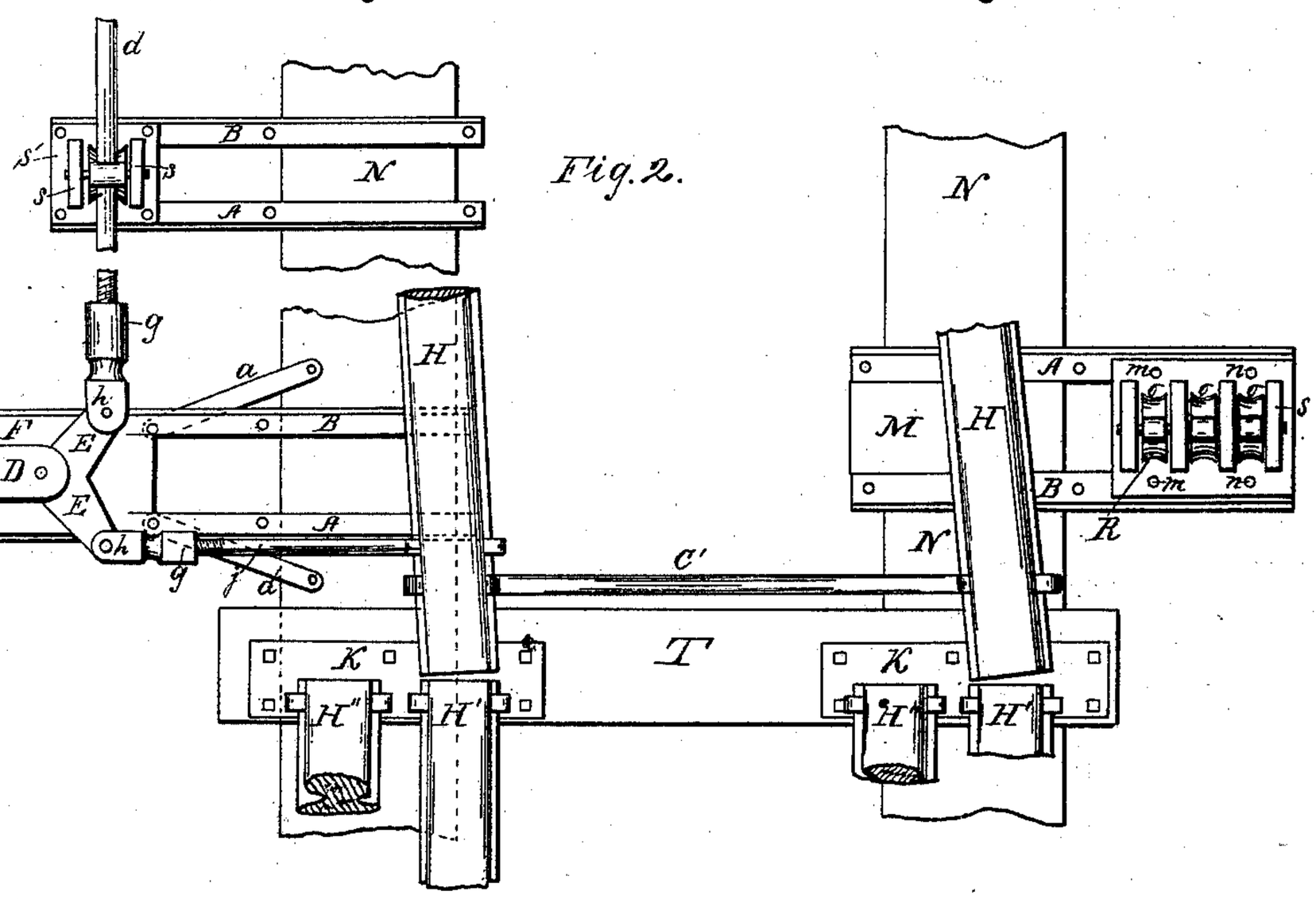


Fig. 3.

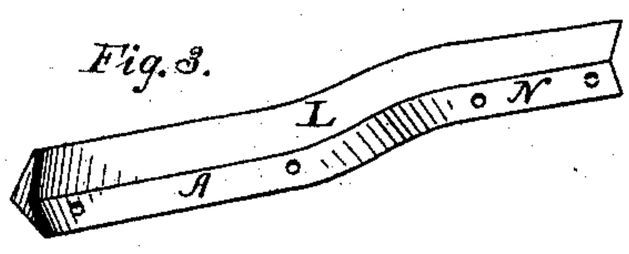
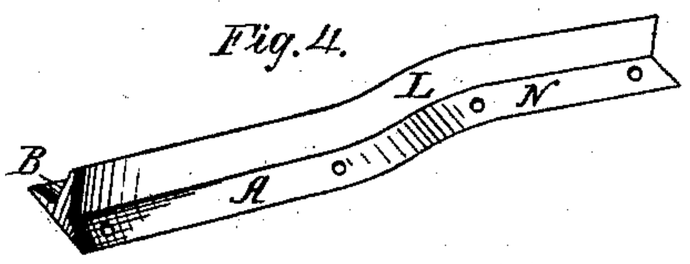


Fig. 4.



WITNESSES

F. L. Emerson

Wm B Stockbon

INVENTOR

Caleb H. Jackson

Stephens Weaver,

ATTORNEY.

UNITED STATES PATENT OFFICE.

CALEB H. JACKSON, OF HARRISBURG, PENNSYLVANIA.

FOUNDATION FOR SWITCH AND SIGNAL CONNECTIONS.

SPECIFICATION forming part of Letters Patent No. 223,650, dated January 20, 1880.

Application filed October 31, 1879.

To all whom it may concern:

Be it known that I, CALEB H. JACKSON, of the city of Harrisburg, county of Dauphin, and State of Pennsylvania, have invented an Improvement in Switch and Signal Connection Foundations for Railways, of which the following is a full, clear, and accurate description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a transverse sectional view of a railway supported on girders with my switch and signal connection foundations applied to said girders. Fig. 2 represents a top view of the same, some of the parts being broken away. Fig. 3 represents a perspective view of one of the extended pedestals or foundations, made of angle-iron. Fig. 4 represents a perspective view of a bell-crank pedestal, made of T-iron.

My improvement is specially designed for that class of railways whose cross-ties are supported upon girders or stringers, thus including elevated railways and railways on bridges and trestle-work.

The nature and object of my invention will be better understood when it is observed that in said class of railways the girders or stringers are located directly under the cross-ties, and are the permanent support of the way, while the cross-ties and rails have to be replaced from time to time by substitutes for those worn out. My invention, therefore, makes provision to mount the switch and signal connection foundations on said girders or stringers permanently and independent of the cross-ties, and consequently they need not be removed when the way proper is being repaired; and for this object or purpose I employ suitable extension pedestals or foundations, which are clamped to said girders by clips, or are bolted thereto direct at their inner ends, and at their other ends are bolted to the bases of the stands. Said pedestals or foundations are made of angle-iron, T-iron, or of other suitable form of bar, and are formed as right and left pedestals, to be applied in pairs with the flange of the angle or T-iron turned up to form a seat between them, on which the bases of the stands may rest.

The principal novel features of my improvement are, first, the offset or extension pedestals, suitably curved or directed to secure proper alignment of the stands mounted thereon with the track when applied to the railway girders or stringers; second, the pedestals, when formed as right and left parts of a pair, and secured, independently of the cross-ties, to the girders or stringers, and joined to the bases of switch-stands directly.

In the description, A B represent the right and left pedestals, respectively, of the foundations, on which are mounted the bell-crank stand F E or the sheave-keeper stand S, also termed the "carrier-stand," and there may in like manner be mounted thereon compensator-stands, which need not be here described. Said pedestals may be made of angle-iron, as shown in Fig. 3, or of T-iron, as shown in Fig. 4. They are curved or offset vertically, as shown in Fig. 1, to obtain the requisite elevation for the stands mounted thereon to present the connecting rods or pipes *d* nearly level with the tops of the cross-ties T. A layer of wood, D′, is sometimes inserted between the base F of the stand and the pedestals A and B.

The track H H′ H″ (shown as a stub-switch) is mounted, by the usual cross-ties, T, on girders N, as in elevated railways, and said pedestals are joined to said girders transversely over the top of them, and held in place by clips P, as shown in Fig. 1, or bolted onto said girders direct.

The device shown at E F *h g* is a bell-crank stand, by which the switch-rails H H are operated and held. Its foundations or pedestals A B have a wrenching strain on them at the time of moving the switch. They are therefore stayed in place by the braces *a a*, which are bolted fast both to the pedestals and to the girder N, as shown.

The device shown at S *l d* is a sheave-keeper stand, by which the connecting-rods *d* are carried on sheave-rollers O therein, and thus guided and stiffened when operated and held. To lessen weight the parts *d* are usually made of pipe, and joined to the jaws *h* by screw-joints at *g*. Its foundations, also, are pedestals A B, and as no strain is on them, since the sheave-rollers relieve friction, no braces are required to stay them; but it is sometimes necessary to insert a layer of wood, M, be-

tween the girder and the pedestals on which it rests to secure correct alignment of the sheaves O with the top of the cross-ties T, which sometimes differ in height or thickness.

Although the main object of my foundations is to supplement the road-bed of elevated railways, as set forth, yet in many instances the ground road-bed of railways may have the pedestals applied to it in several ways, as, first, there may be a sill of wood inserted under the cross-ties, to which they may be spiked; second, plank may be supported on or over the cross-ties, to which the pedestals A B may be attached. In the latter case the outer ends of the said pedestals must be depressed or bent down instead of up—that is, their ends must be reversed to obtain the proper alignment of the stands with the track.

Having thus fully and clearly described my invention, I here append the following claims:

1. The pedestals or foundations A B, suitably offset or directed to secure proper alignment of the stands mounted thereon with the railway-track H, and secured to the girders N, substantially as and for the purposes set forth.

2. The pedestal A B, secured to a railway girder or stringer, N, in combination with the base of a switch-connection stand, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand this 21st day of October, 1879.

CALEB H. JACKSON.

Attest:

THEOPHILUS WEAVER,

D. A. KEPNER.